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CRUISE REPORT

FRV "GOLDSEEKER"

18th May-3rd June 1971

Objectives

- (1) To investigate the stocks of Nephrops and Pandalus in the South Minch.
- (2) To study the distribution and abundance of scallops in the same area.
- (3) To take daily surface temperature readings.

Narrative

The scientific staff joined "Goldseeker" at Ardrishaig on 17th May and work commenced in the Tiree Passage on the 19th May. Unsettled weather conditions handicapped operations throughout the trip with fresh to strong west to north-west winds prevailing. A total of 14 trawl hauls using the Standard "Goldseeker" Nephrops trawl with 70 mm cod-end and small mesh cover were made at positions SW of Rhum; NW Coll; Oigh Sgeir and in Loch Linnhe. Dredging operations were also carried out in these positions: a total of 35 - 15 minute hauls using a standard 4 ft scallop dredge were taken. The cruise ended at Corpach on 3rd June.

Results

(1) Trawling

Hauls were made in the areas stated above, the best catches being taken in Loch Linnhe where two half-hour hauls yielded 371 and 194 Nephrops respectively. A total of 793 males and 552 females were measured, the carapace length compositions of which are tabulated below. The mean carapace length of males was 43.27 mm and females 33.74 mm. 12 of the females were berried.

Nephrops norvegicus Size distribution in 5 mm groups

Carapace mm	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Totals
♂	13	65	98	205	220	84	54	32	18	4	793
%	1.6	8.2	12.4	25.9	27.7	10.6	6.8	4.0	2.3	0.5	
♀	16	98	192	156	86	4					552
%	2.9	17.7	34.8	28.3	15.6	0.7					
♂ & ♀	29	163	290	361	306	88	54	32	18	4	1,345
%	2.2	12.1	21.6	26.8	22.7	6.5	4.0	2.4	1.3	0.3	

The fish catch consisted largely of Long Rough Dabs, T. esmarkii, Witch and Whiting. 1062 individuals of 16 species of fish were examined for the presence of larval nematodes in their musculature, 8 fish species were found to be infested; these are shown in the table below, together with the incidence of infestation. All worms found were Porrocaecum decipiens except in whiting from which Anisakis species was recovered. Samples of benthic crustaceans which may act as first intermediate hosts for Porrocaecum decipiens were collected and preserved for later examination.

<u>Species</u>	<u>No. examined</u>	<u>No. infested</u>	<u>% Incidence of infestation</u>
Cod	11	10	90.9
Whiting	45	2	4.4
Haddock	16	1	6.3
Lythe	1	1	(100)
<u>T. minutus</u>	78	5	6.4
Long Rough Dab	677	62	9.2
Witch	66	8	12.1
<u>Callionymus</u>	53	3	5.7

Samples of Pandalus and Crangon which were very scarce were taken to the laboratory for examination.

#### Dredging

35 hauls of 15 minute duration were made using a standard 4' scallop dredge. A total of 376 Pecten maximus were caught. Distribution was widespread; the best hauls were taken south of Eigg where 9 hauls yielded 235 P. maximus in excellent condition.

#### Hydrography

Surface temperature readings were made daily.

J. A. SINCLAIR  
17 August 1971